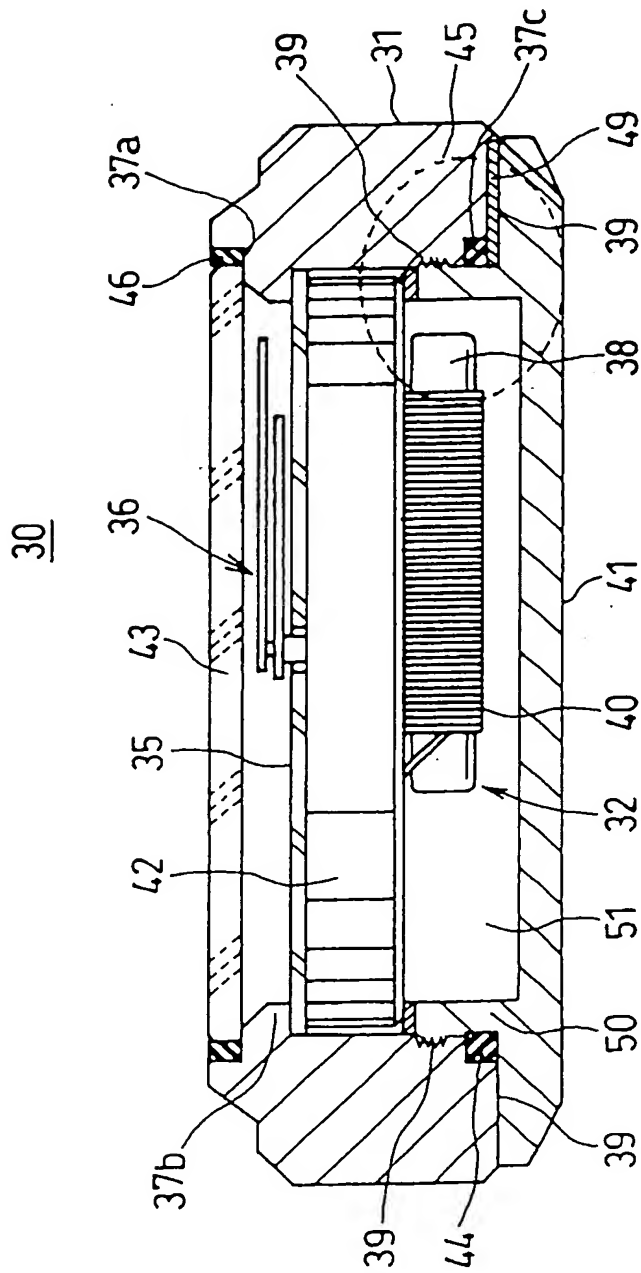


Fig. 1



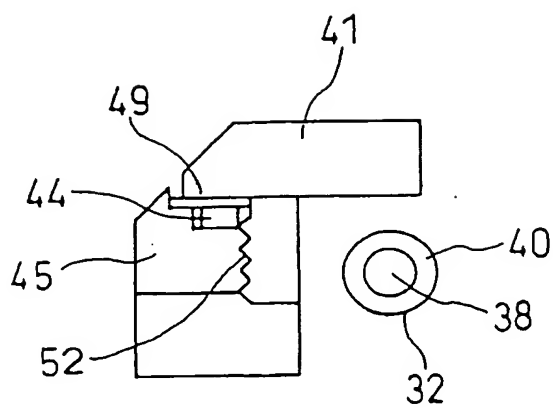
2 / 3 4

Fig. 2



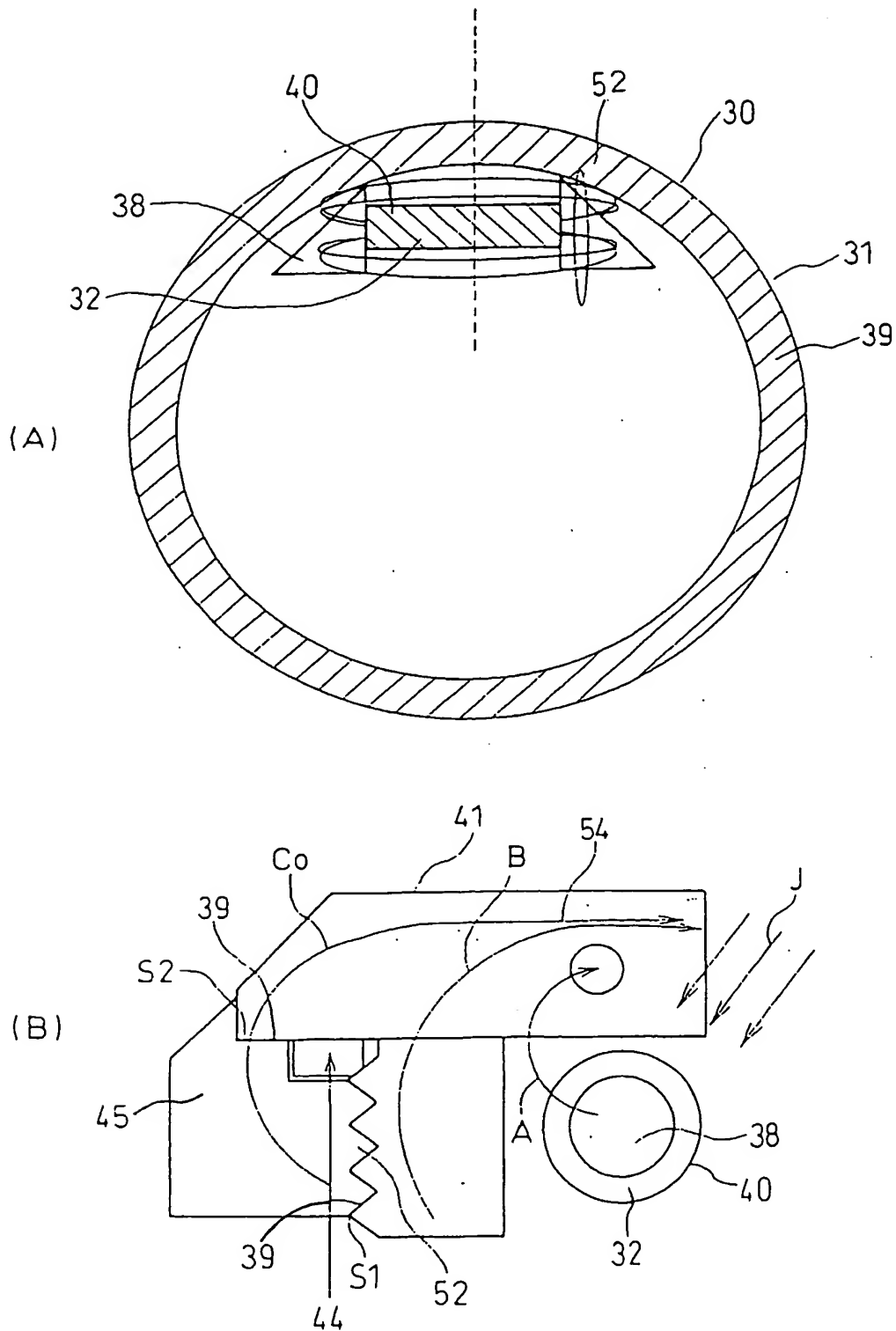
3 / 3 4

Fig. 3



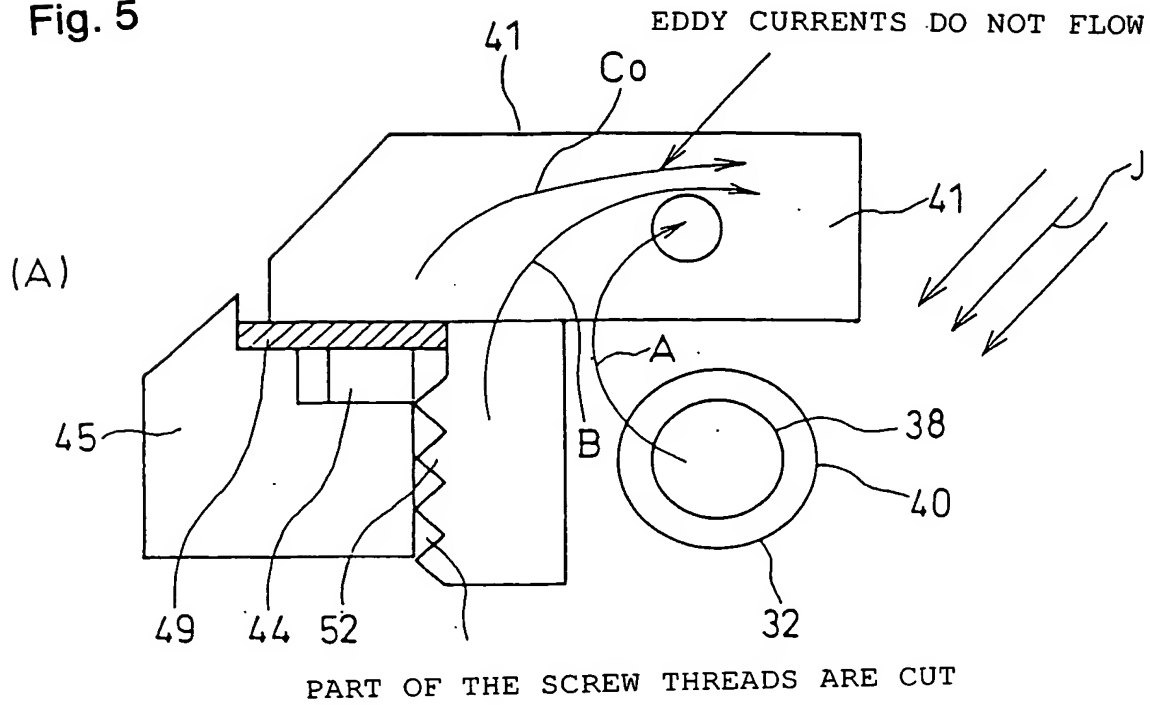
4 / 34

Fig. 4



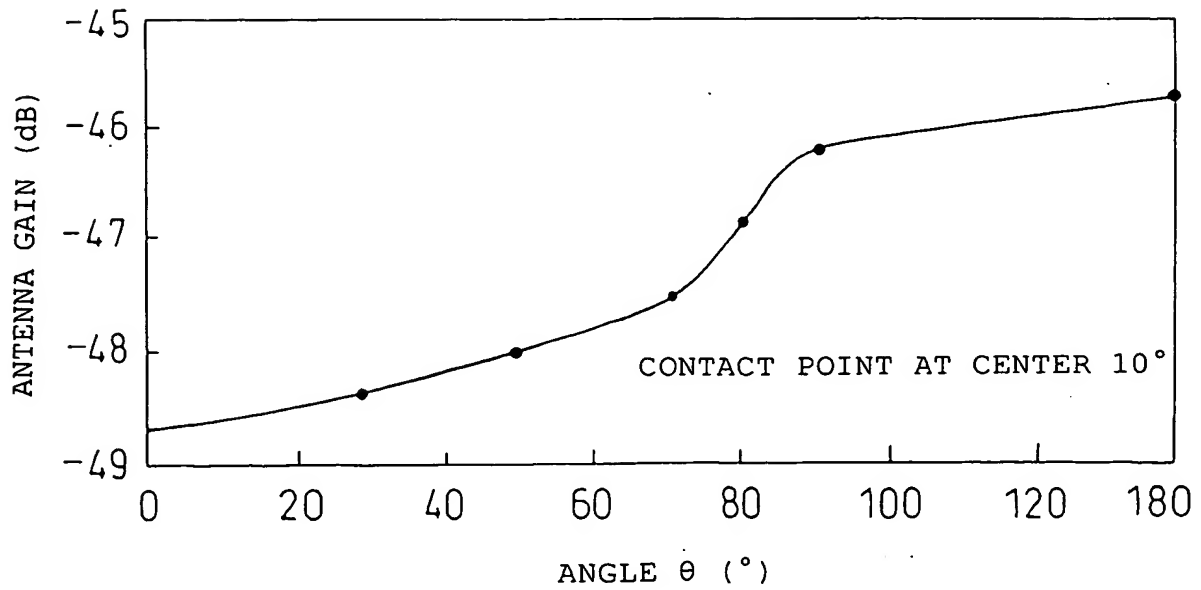
5 / 3 4

Fig. 5



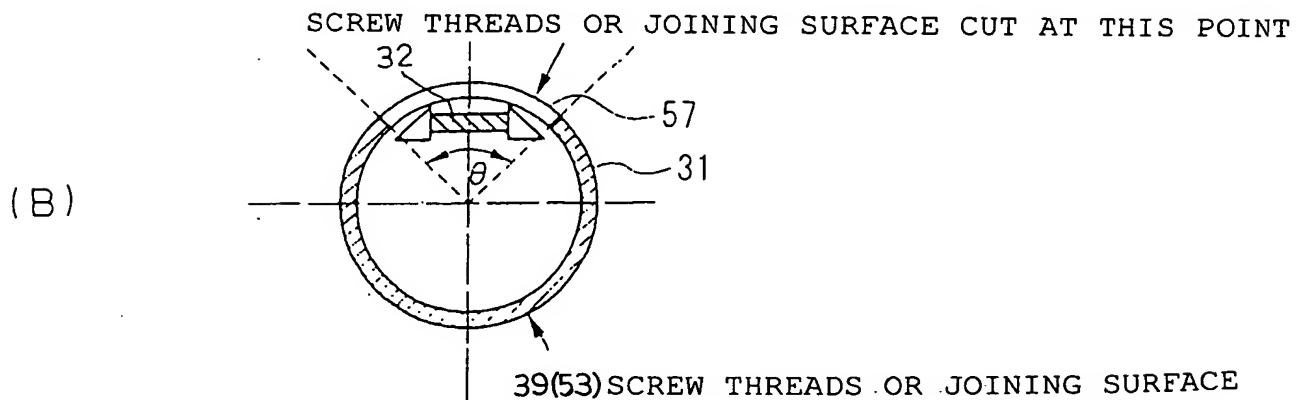
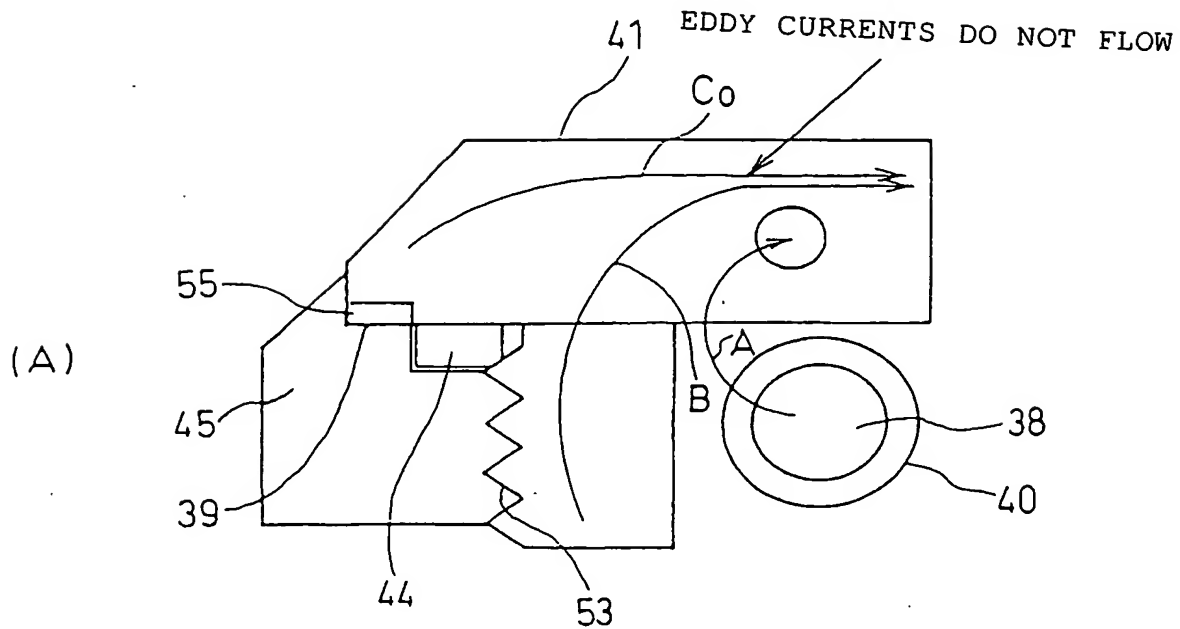
(B)

EFFECT ON GAIN OF REMOVING SCREW THREADS



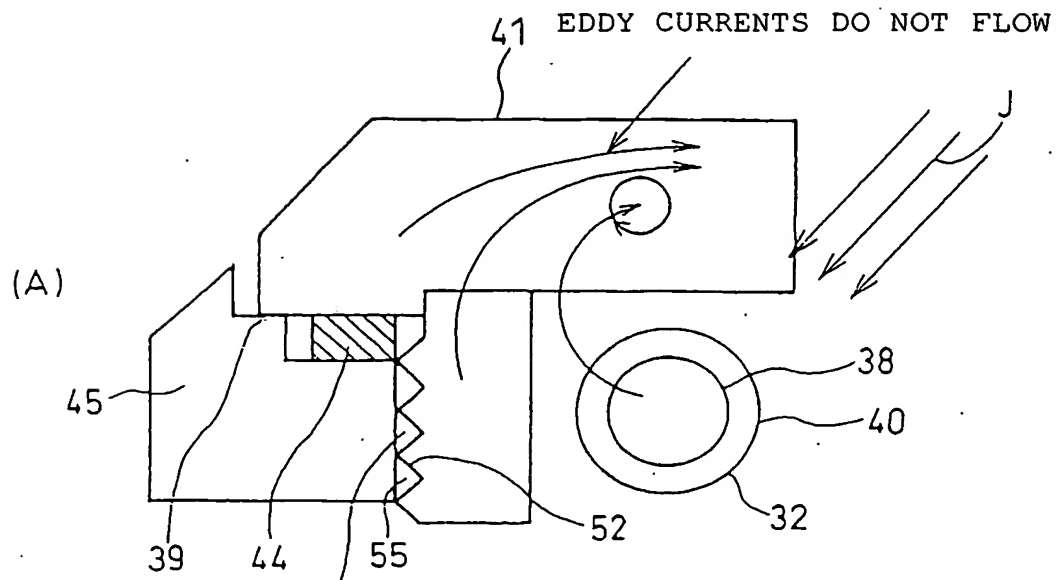
6/34

Fig. 6



7/34

Fig. 7



PART OF SCREW THREADS CUT

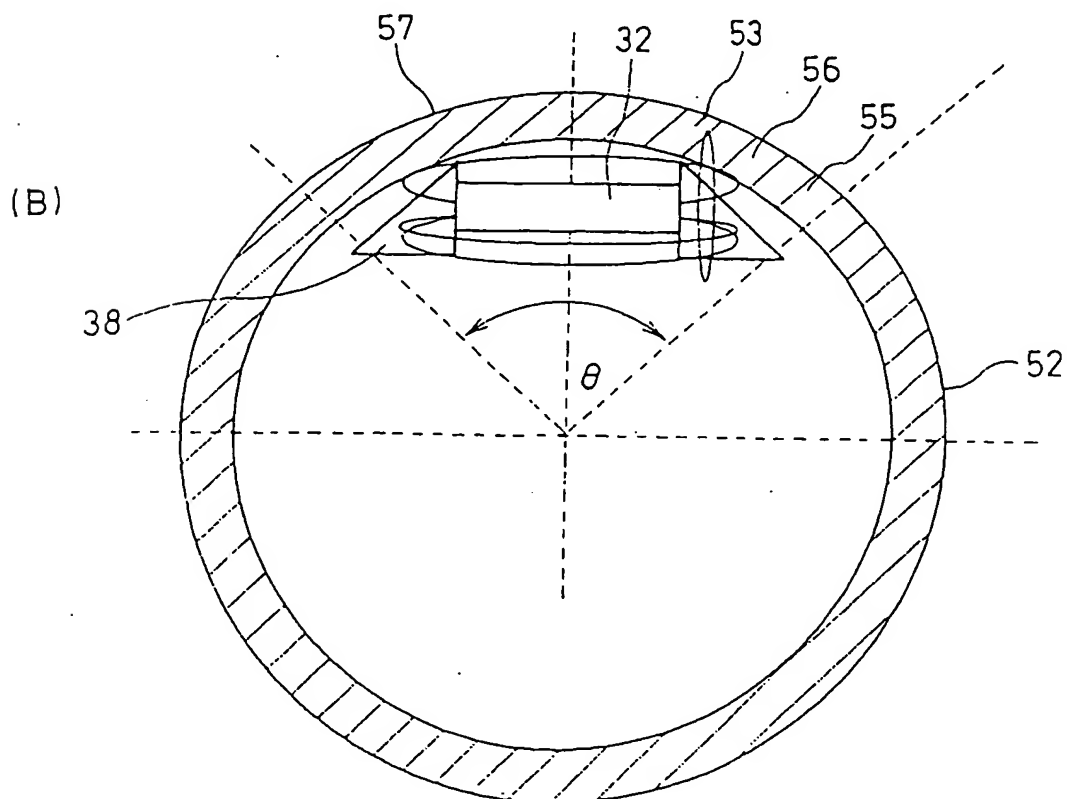
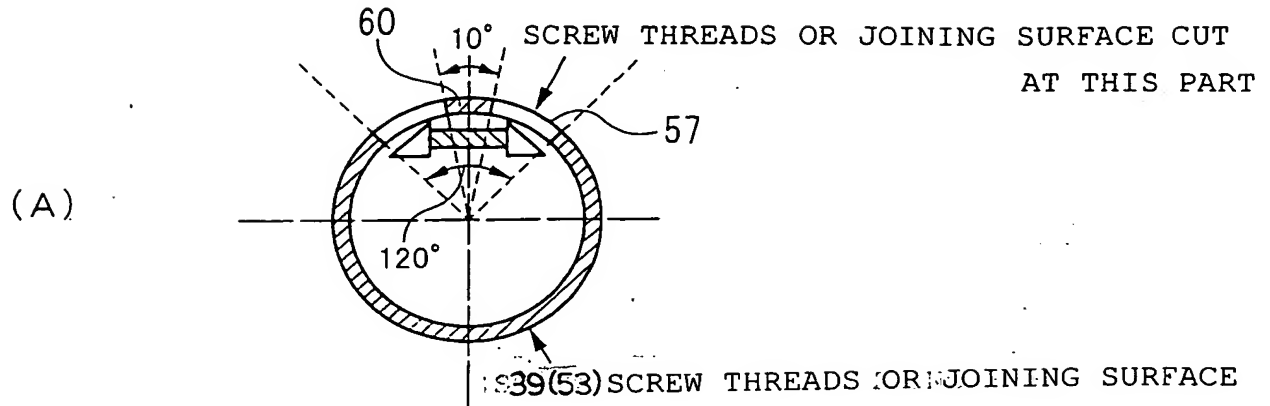


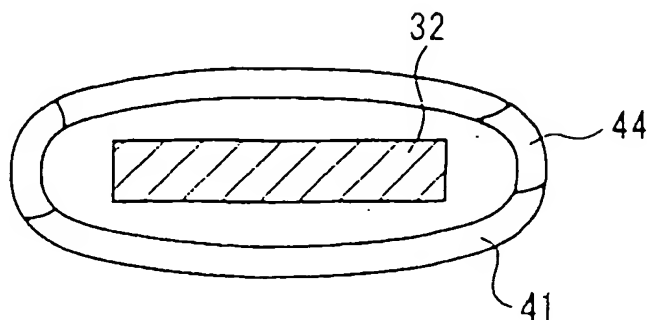
Fig. 8



(B.)

	BEFORE CHANGE	AFTER CHANGE	NO 10° CONTACT POINT
RESONANT FREQUENCY (KHz)	41.4	41.6	40
GAIN (dB)	-48.69	-48.16	-45.9
BANDWIDTH (Hz)	7845	7412	5832
Q	5.24	5.47	6.82

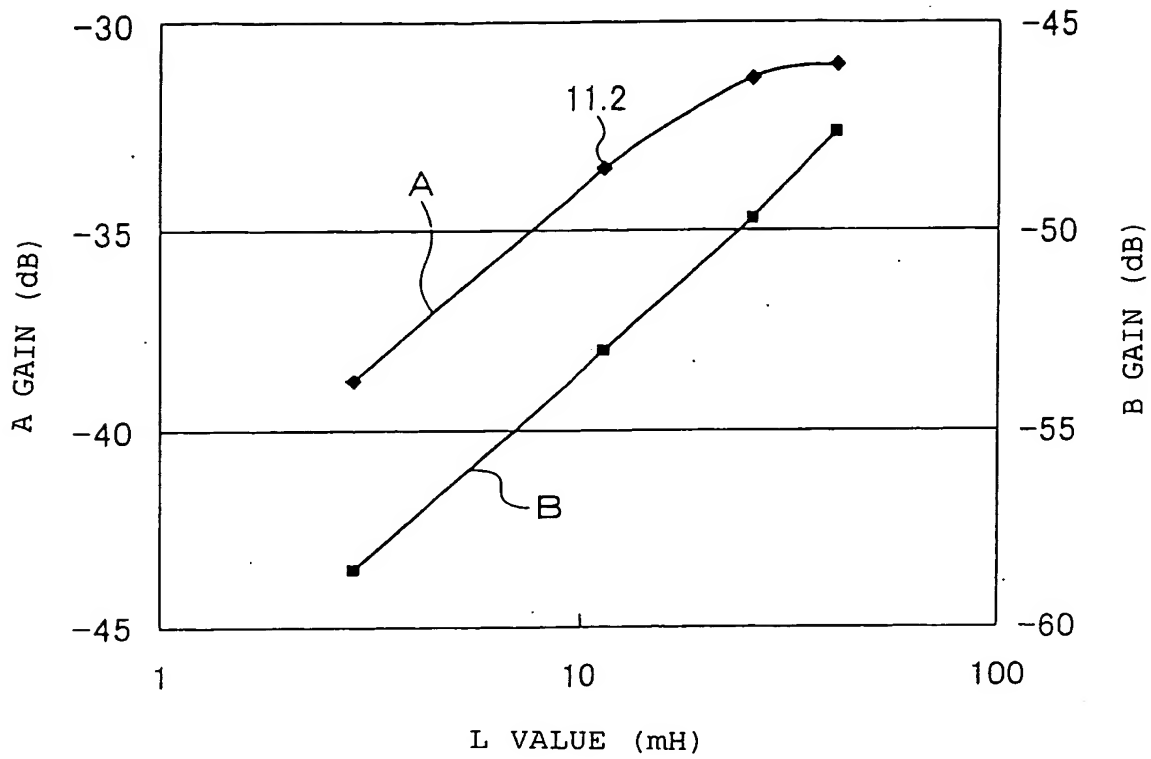
Fig. 9



9 / 3 4

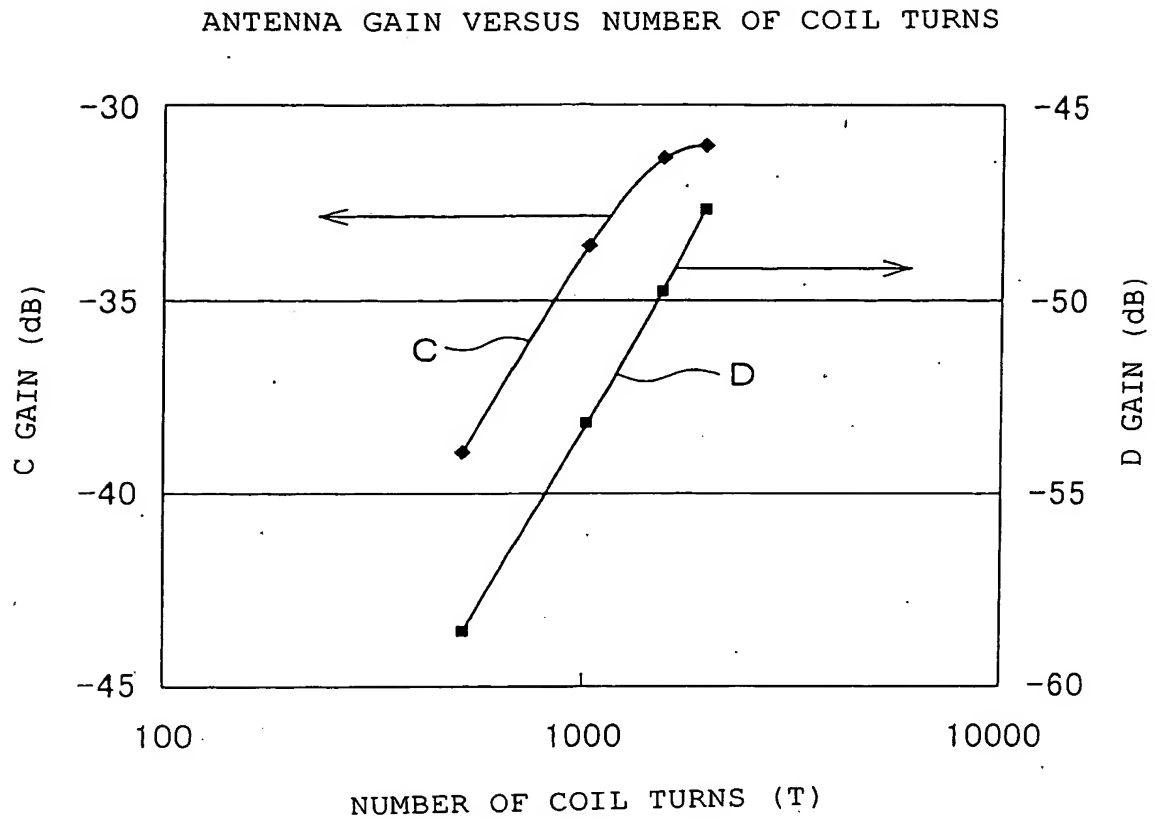
Fig. 10

ANTENNA GAIN VERSUS L VALUE



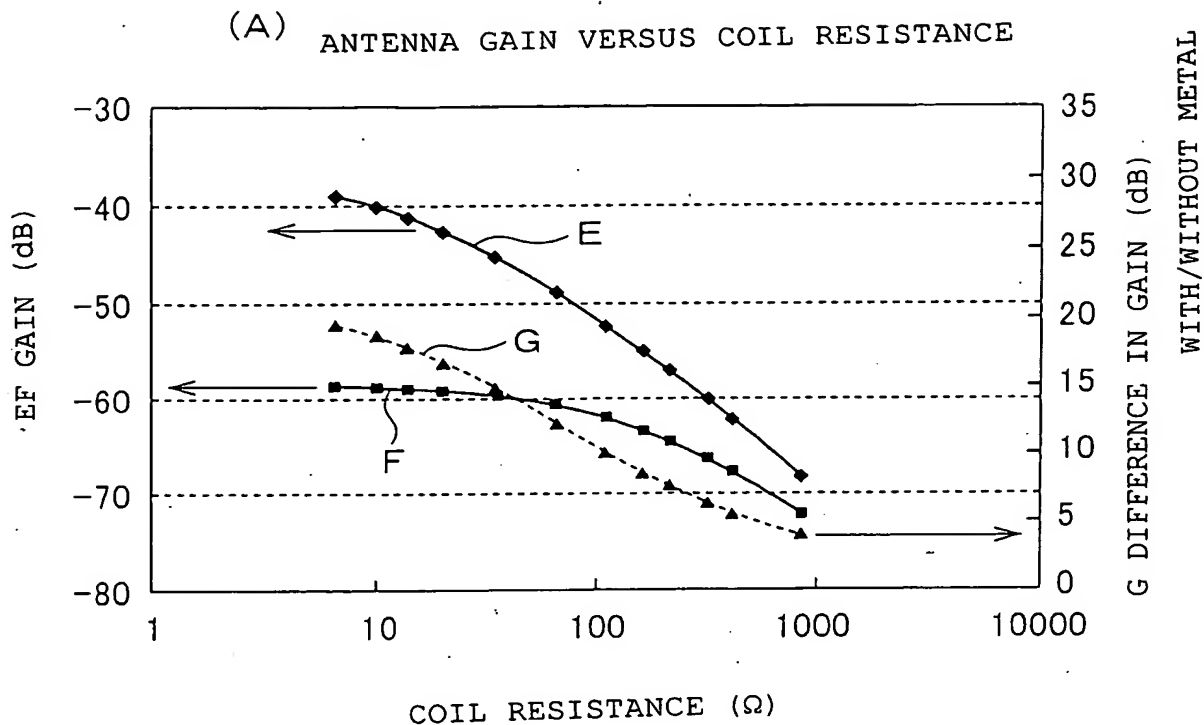
10/34

Fig. 11

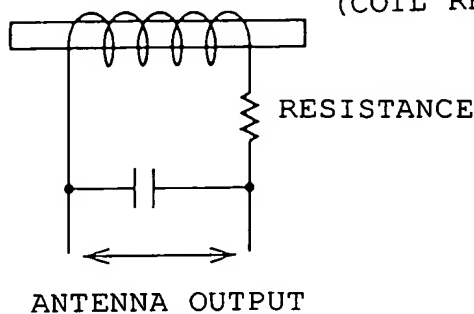


11/34

Fig. 12

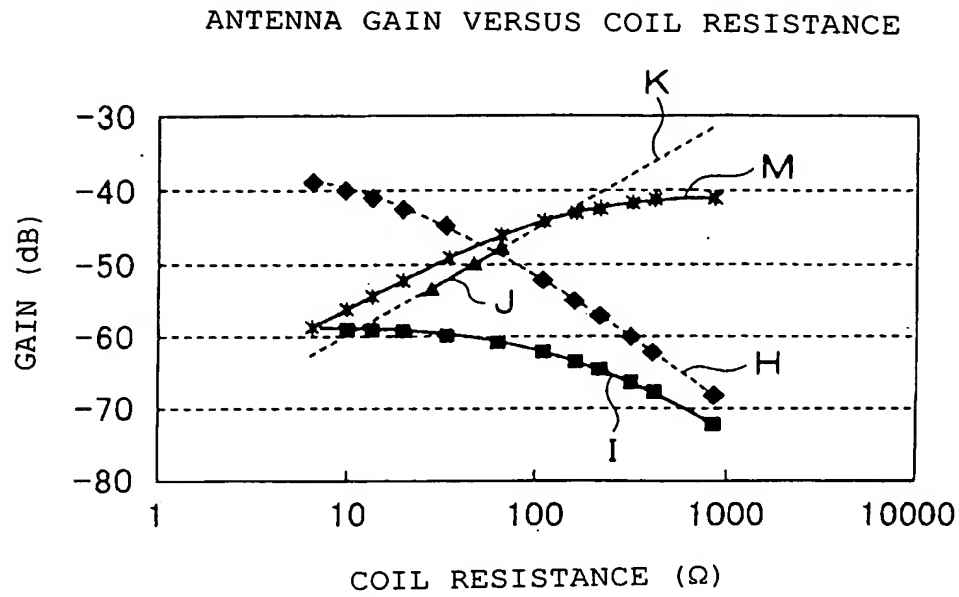


(B) NUMBER OF TURNS: 500 T
(COIL RESISTANCE: 6.4 Ω)



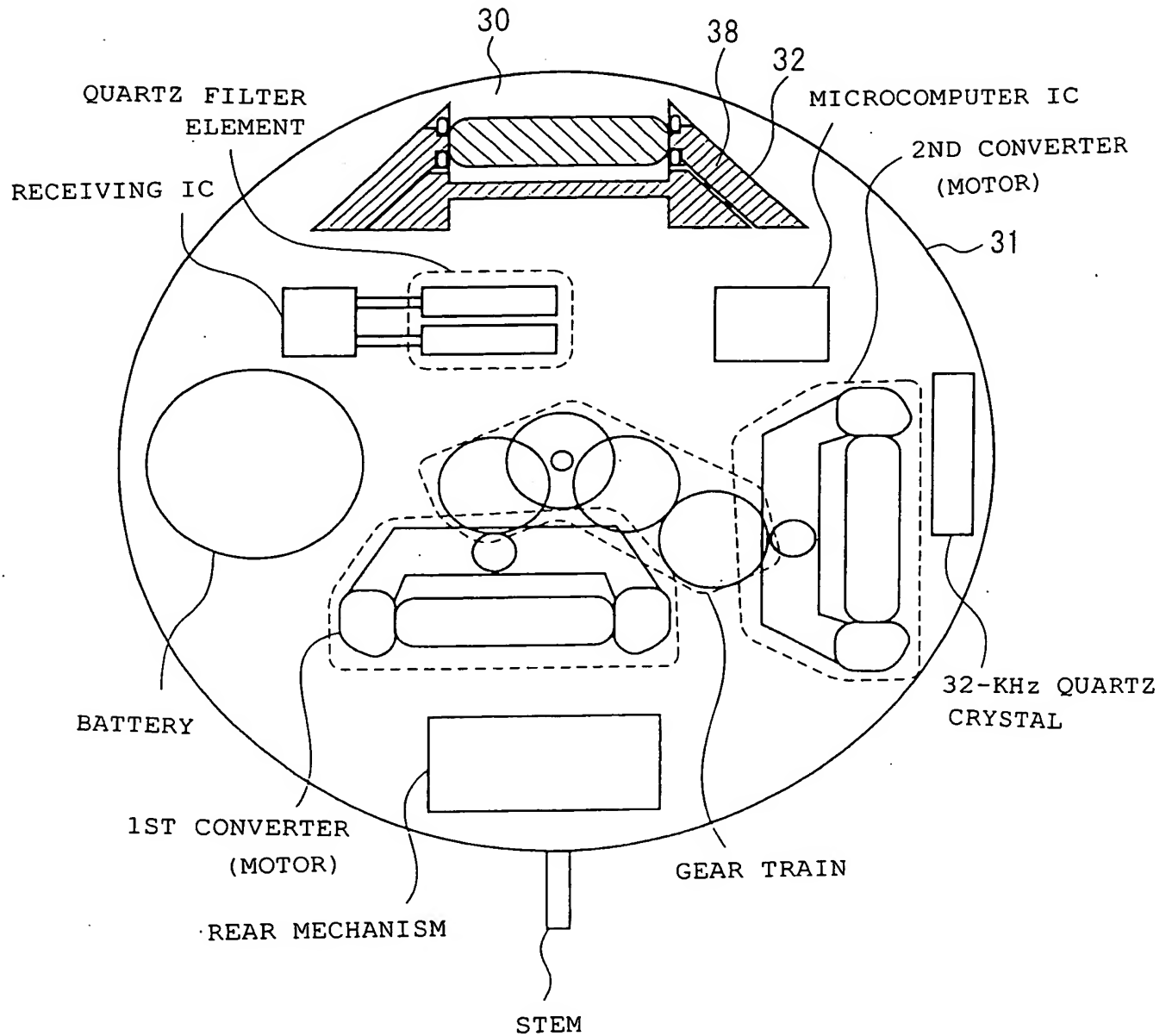
12 / 34

Fig. 13



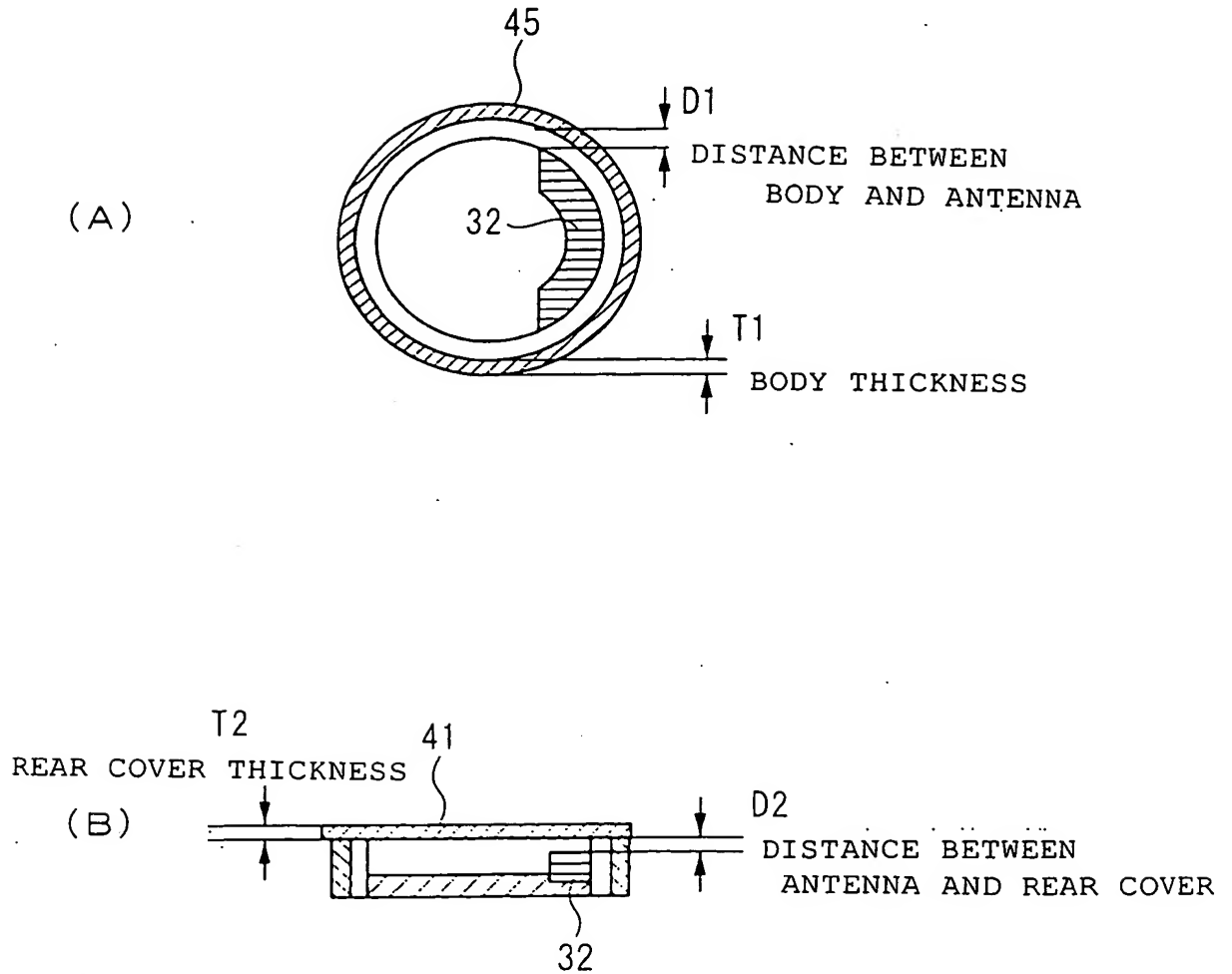
13/34

Fig. 14



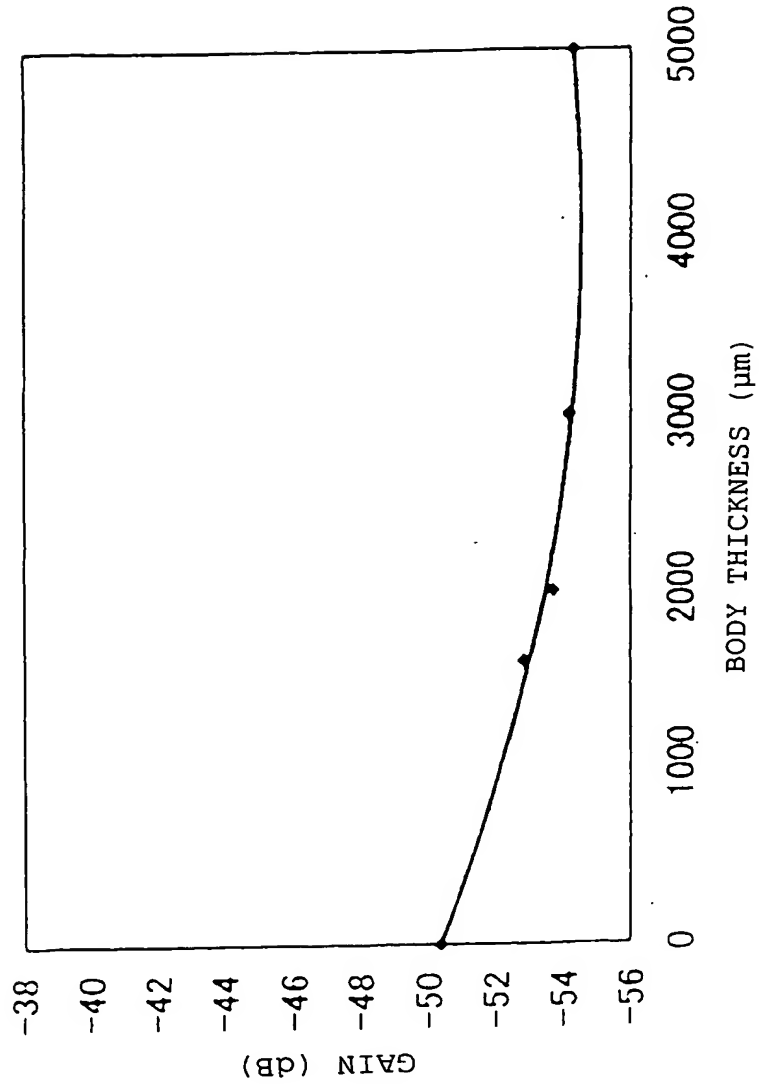
14 / 34

Fig. 15



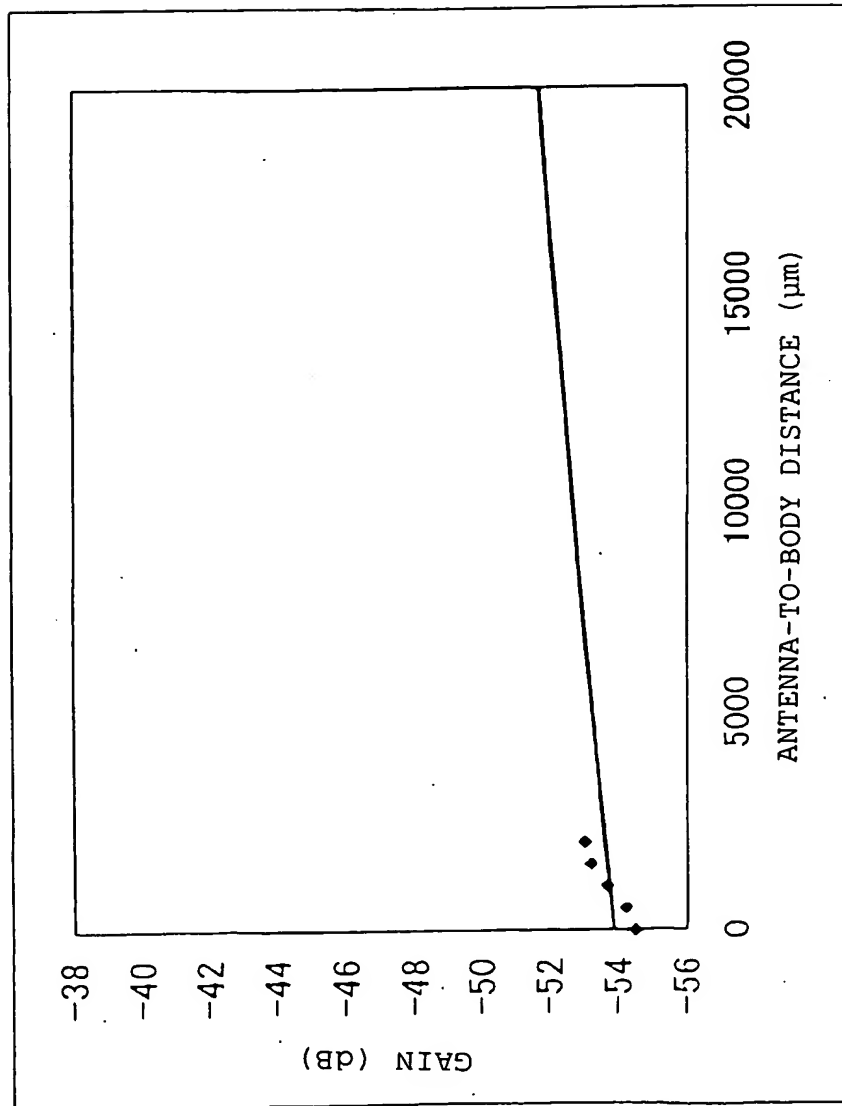
15 / 34

Fig. 16



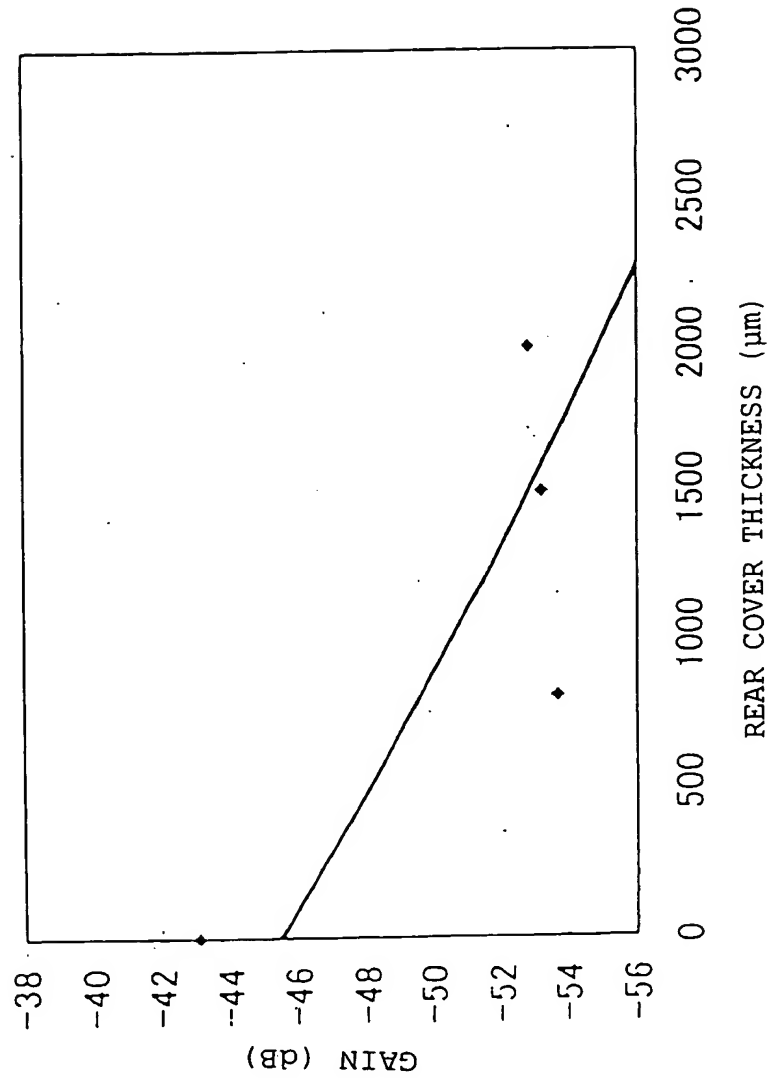
16/34

Fig. 17



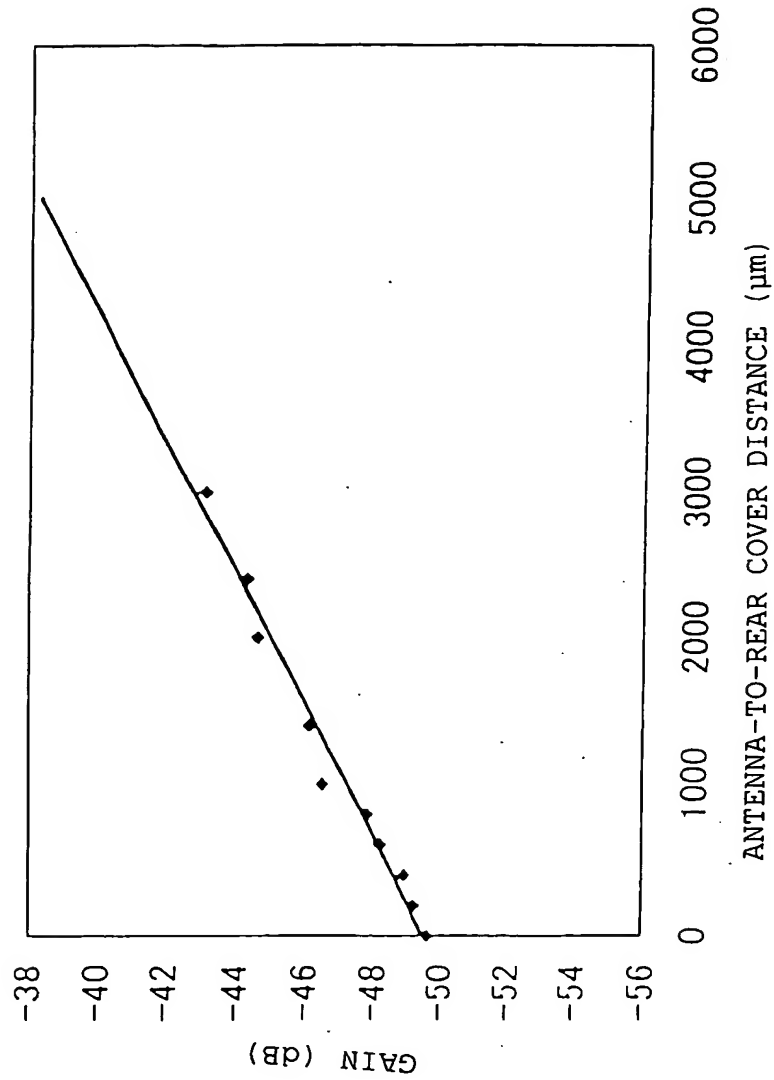
17/34

Fig. 18



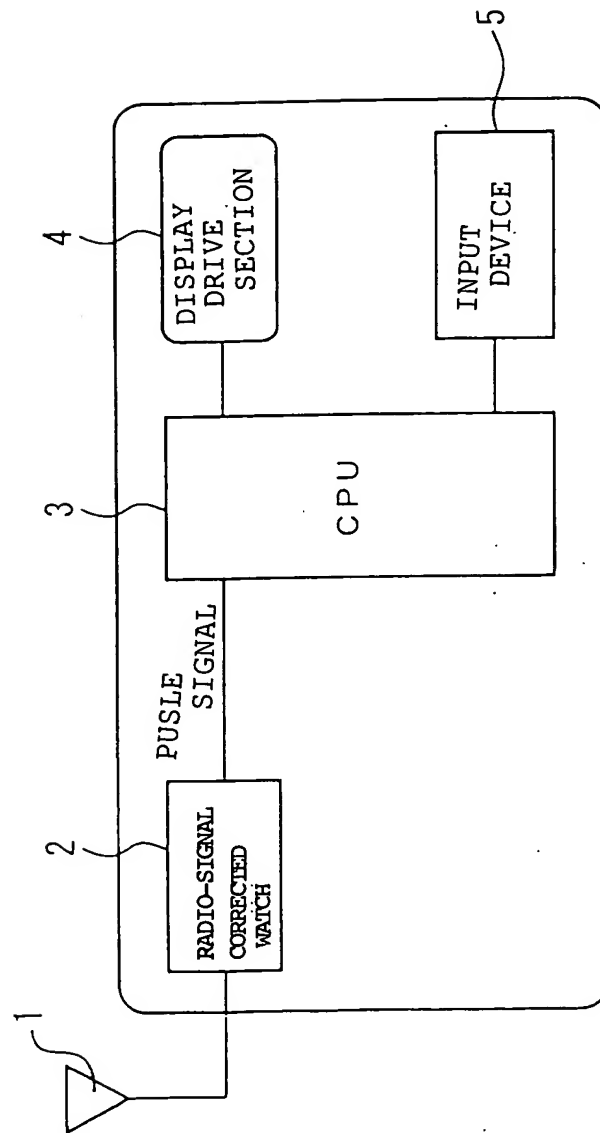
18 / 34

Fig. 19



19/34

Fig. 20



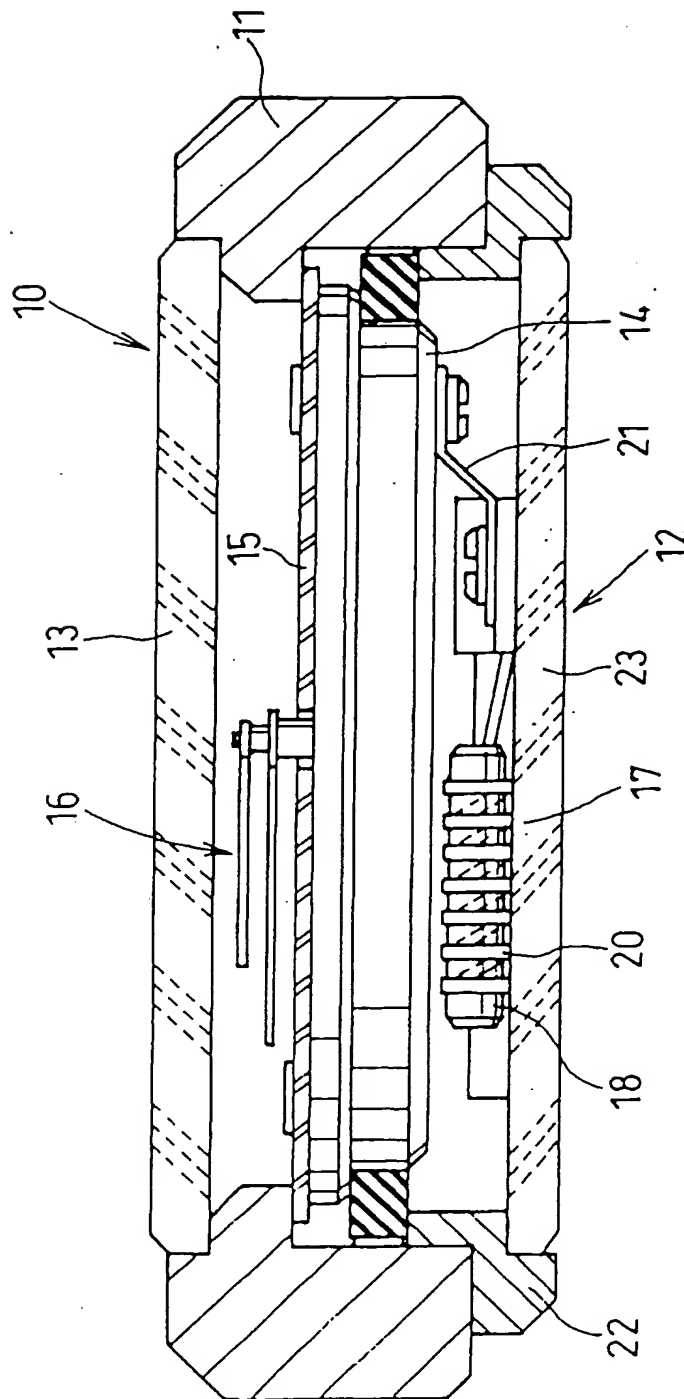
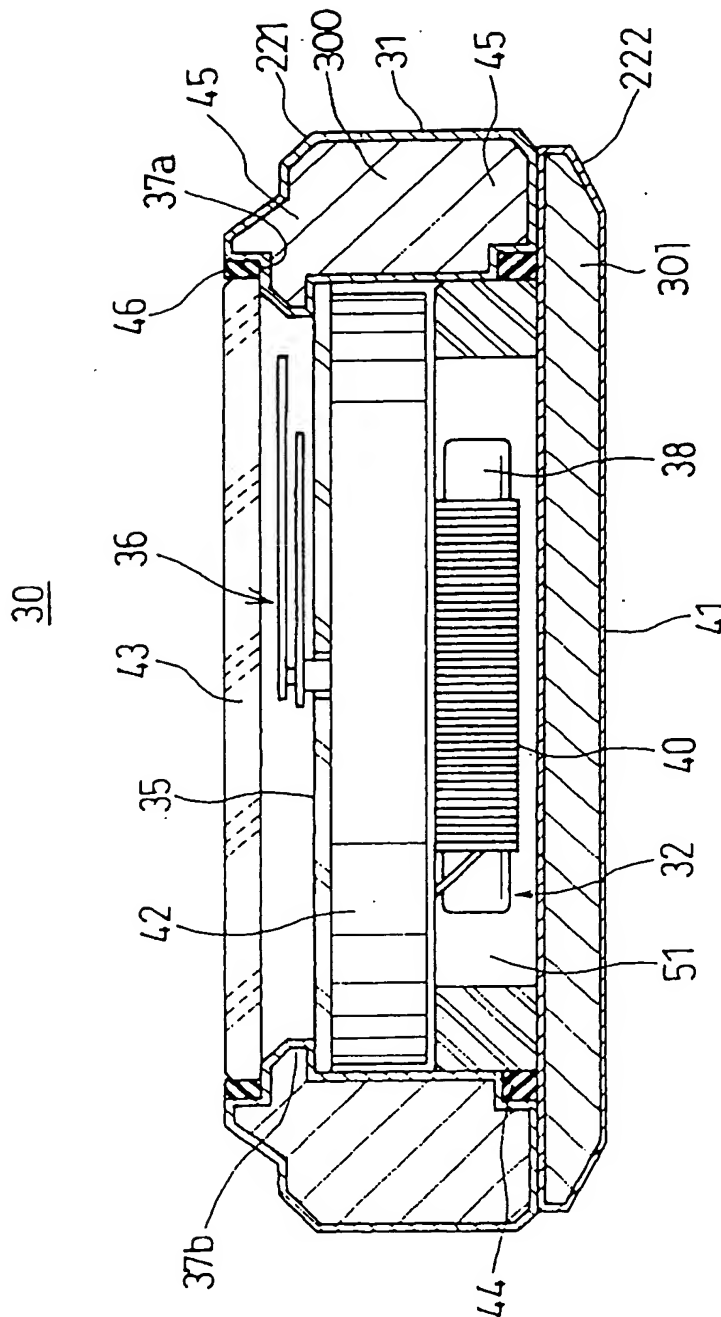
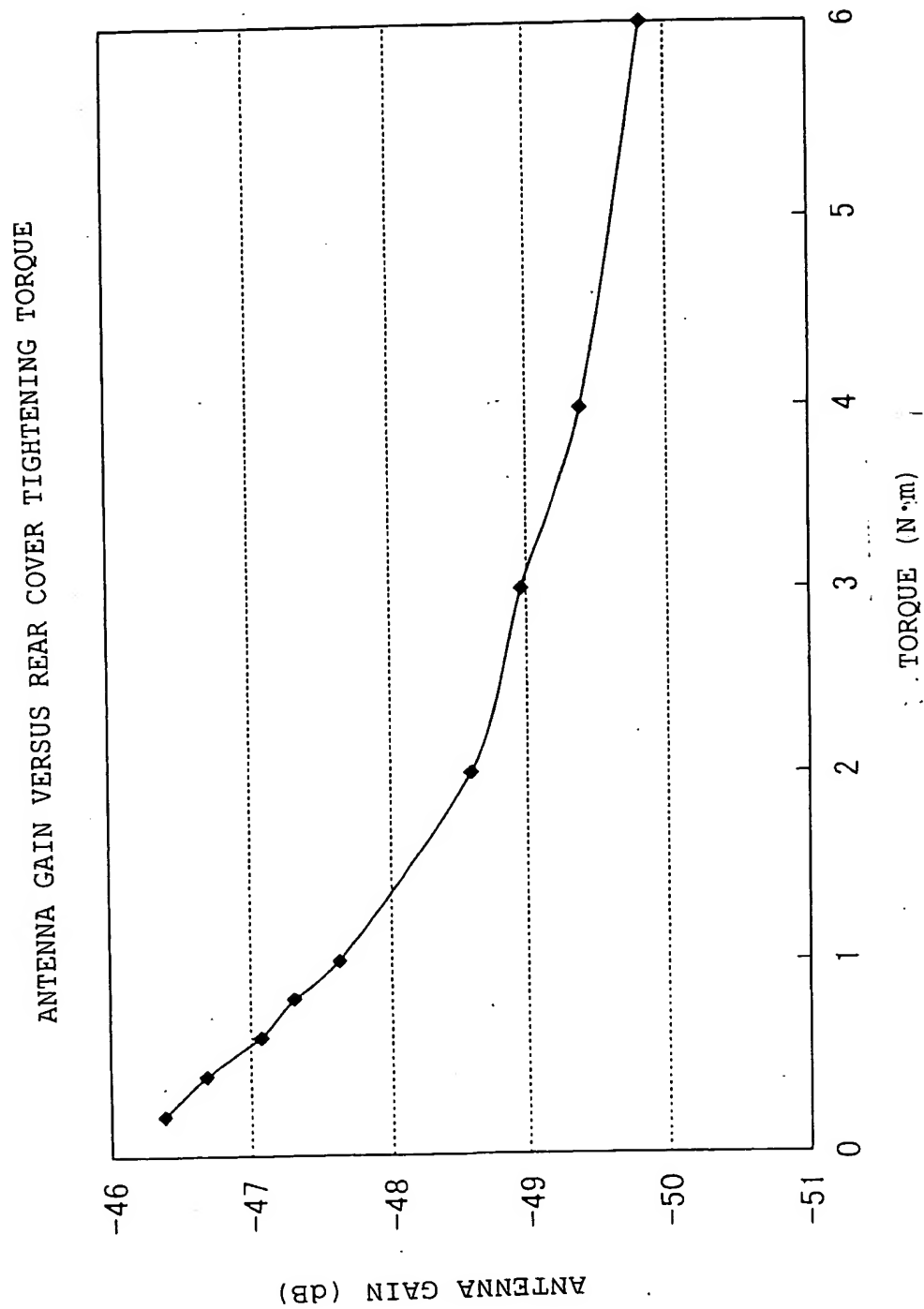


Fig. 22



2 2 / 3 4

Fig. 23



23/34

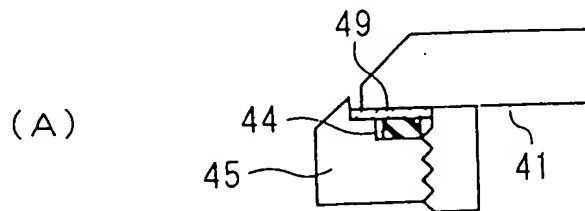
Fig. 24

	BEFORE CHANGE	AFTER CHANGE
RESONANT FREQUENCY (KHz)	41.9	41.7
GAIN (dB)	-49.86	-49.47
BANDWIDTH (Hz)	8305	8253
Q	5.00	5.02

Fig. 25

	BEFORE CHANGE	AFTER CHANGE
RESONANT FREQUENCY (KHz)	41.9	41.3
GAIN (dB)	-49.86	-49.3
BANDWIDTH (Hz)	8305	7959
Q	5.00	5.18

Fig. 26



(B)

	BEFORE CHANGE	AFTER CHANGE
RESONANT FREQUENCY (KHz)	41.9	41.8
GAIN (dB)	-49.86	-49.3
BANDWIDTH (Hz)	8305	7806
Q	5.00	5.25

24 / 34

Fig. 27

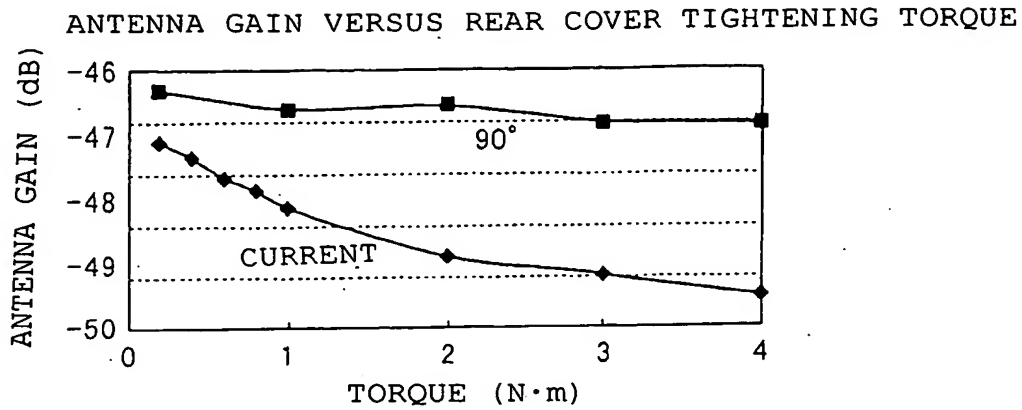
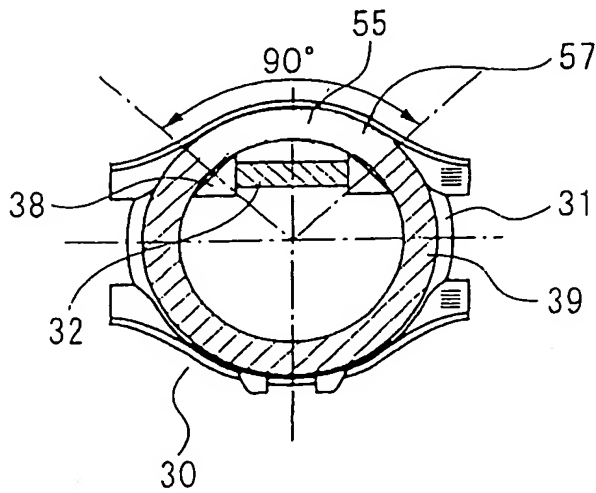


Fig. 28



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25 / 34

Fig. 29

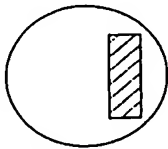
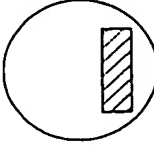
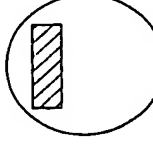
	MASS PRODUCTION SAMPLE A	PRE-PRODUCTION SAMPLE B	SAMPLE C	SAMPLE D T1	SAMPLE E SS	PRE-PRODUCTION SAMPLE F
RESONANT FREQUENCY (KHz)	40.9	41.2	41.3	41.8	41.0	41
GAIN (dB)	-47.7	-48.77	-47.4	-51.3	-49.54	-44.5
BANDWIDTH (Hz)	7130	7609	6195	8239	7351	4704
Q	5.69	5.35	6.66	5.07	5.56	8.67

Fig. 30

	SAMPLE D Ti		SAMPLE E SS	
	BEFORE CHANGE	AFTER CHANGE	BEFORE CHANGE	AFTER CHANGE
RESONANT FREQUENCY (KHz.)	41.8	41.6	41.0	40.4
GAIN (dB)	-51.3	-48.7	-49.54	-46.8
BANDWIDTH (Hz)	8239	6877	7351	6434
Q	5.07	5.99	5.56	6.27

Notes: bolting torque is fixed 3 N·m.

Fig. 31

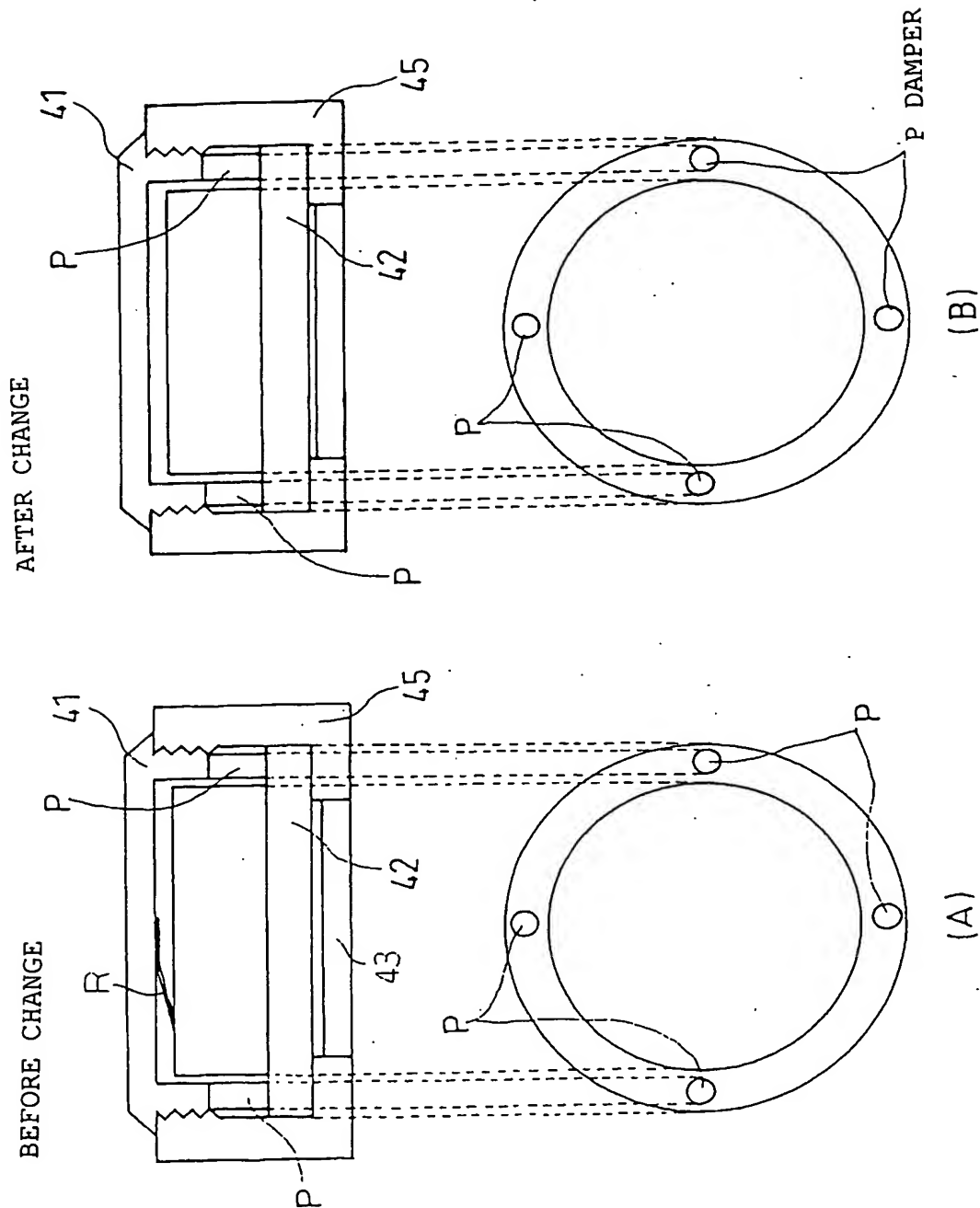
	no cut 		 cut part		 cut part	
RESONANT FREQUENCY (KHz)	41	61.6	40	59	41.3	61.2
ref(dB)	-48.8	-48.8	-45.96	-46.3	-48.1	-48.2
ΔF	7928	13798	5816	11090	7309	13213
Q	5.14	4.42	6.86	5.3	5.55	4.6



ANGLE	LENGTH (B)	RATIO (B/A)
10	2.614617	0.217885
30	7.76441	0.647034
50	12.6783	1.056525
120	25.98043	2.165036
180	30	2.5

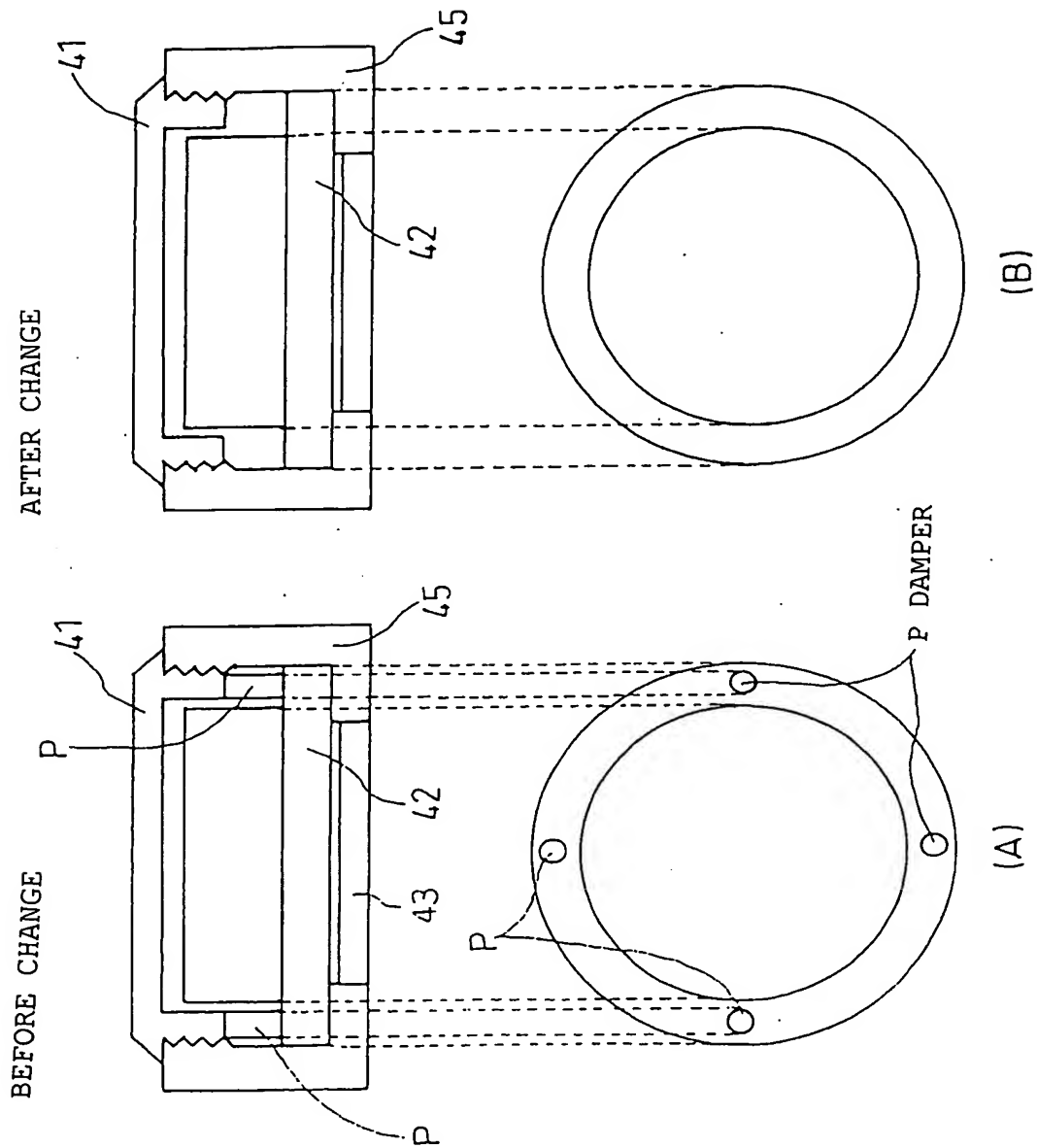
28 / 34

Fig. 33



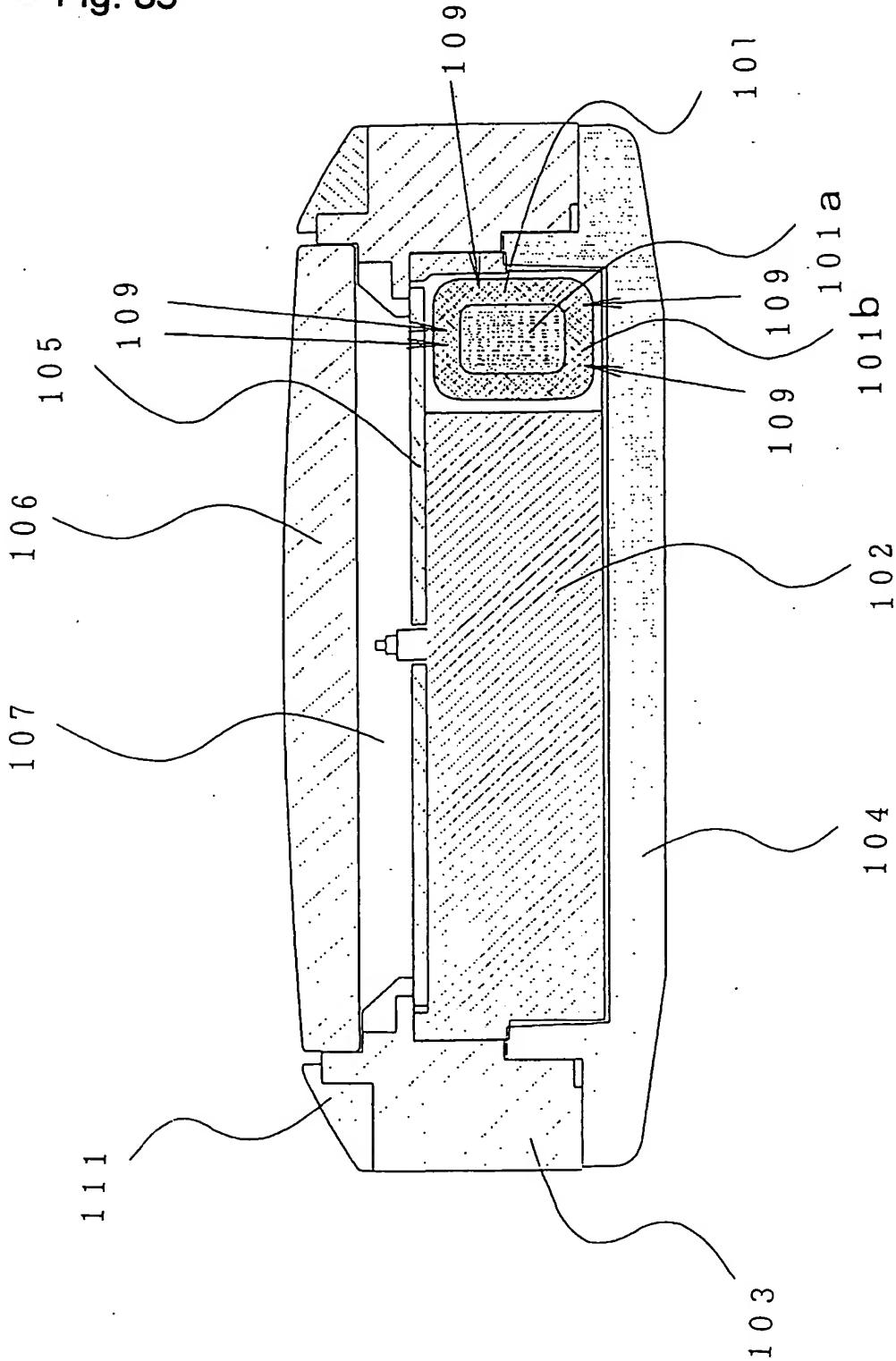
29 / 34

Fig. 34



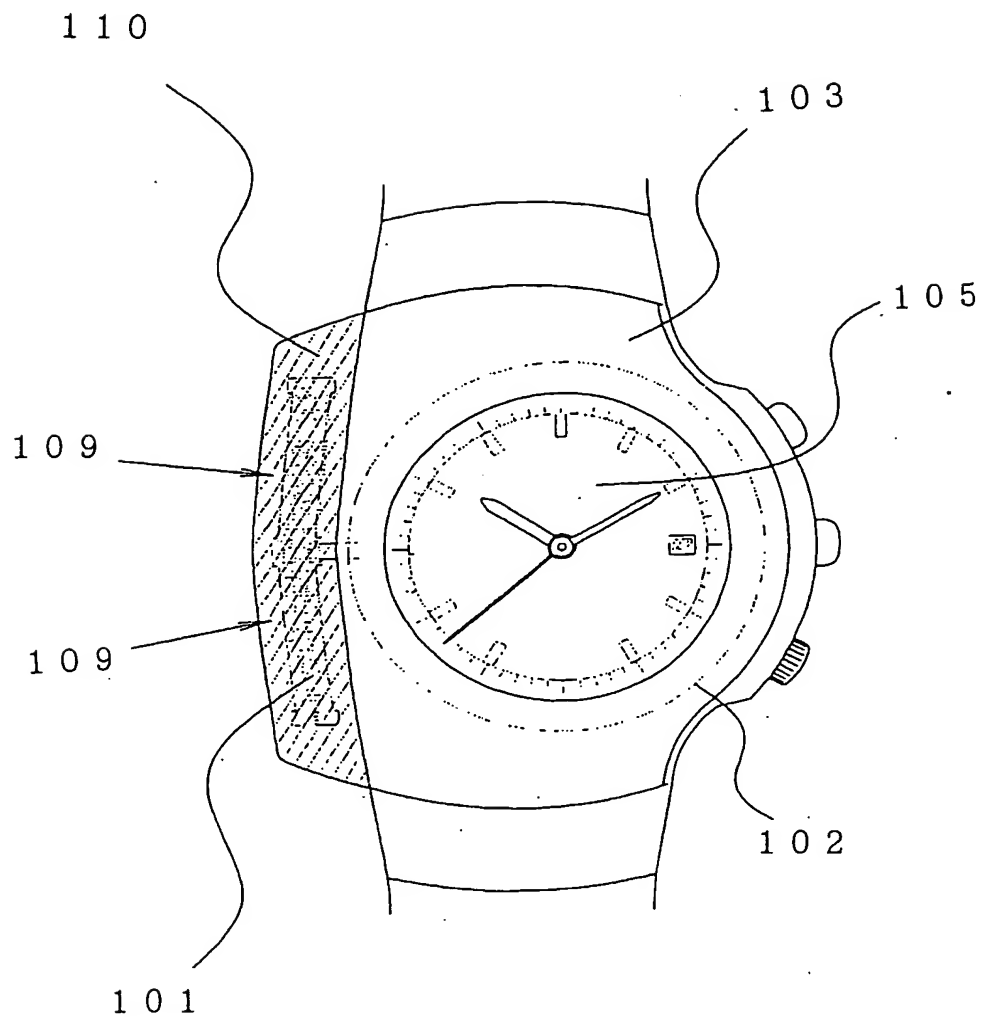
30/34

Fig. 35



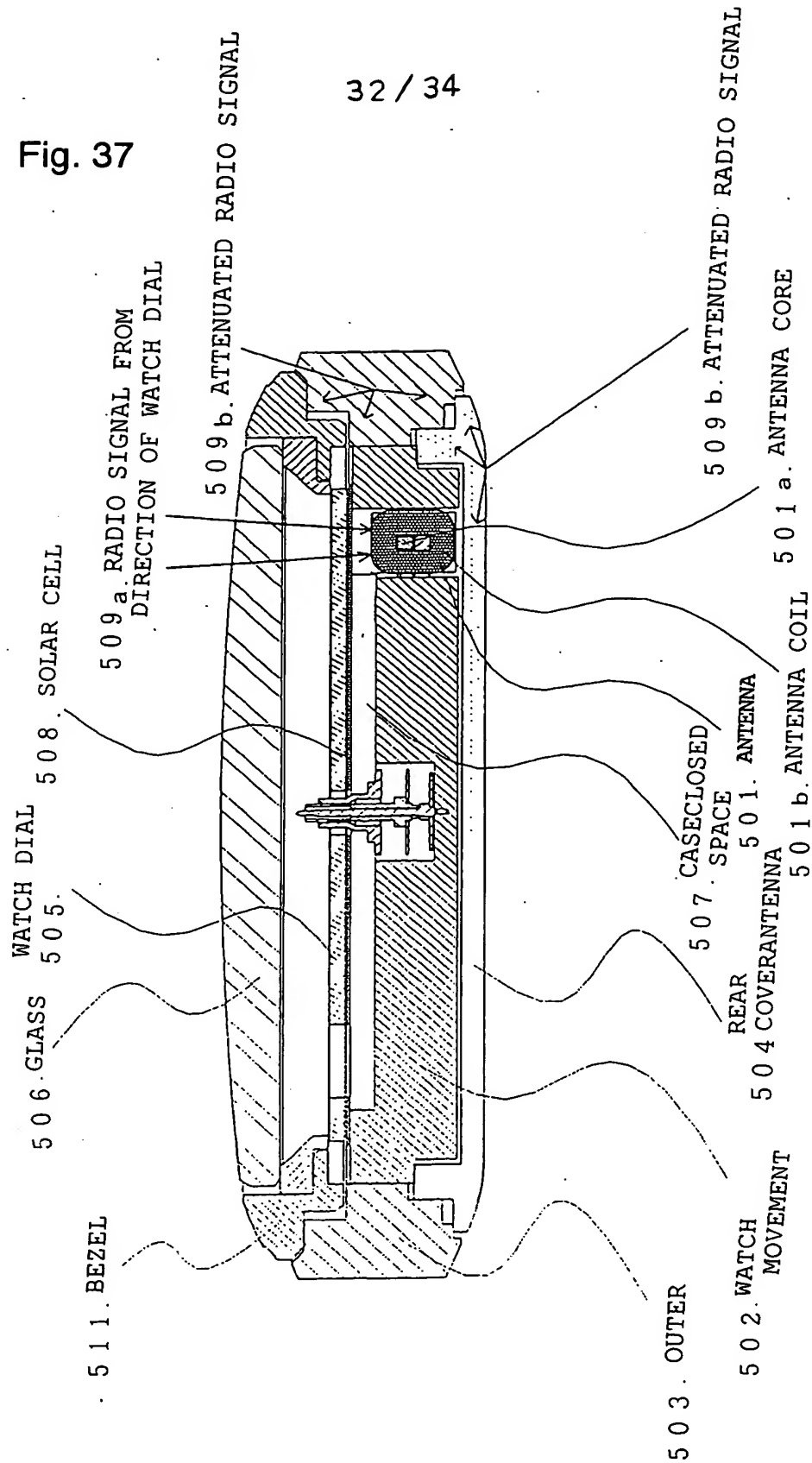
31 / 34

Fig. 36



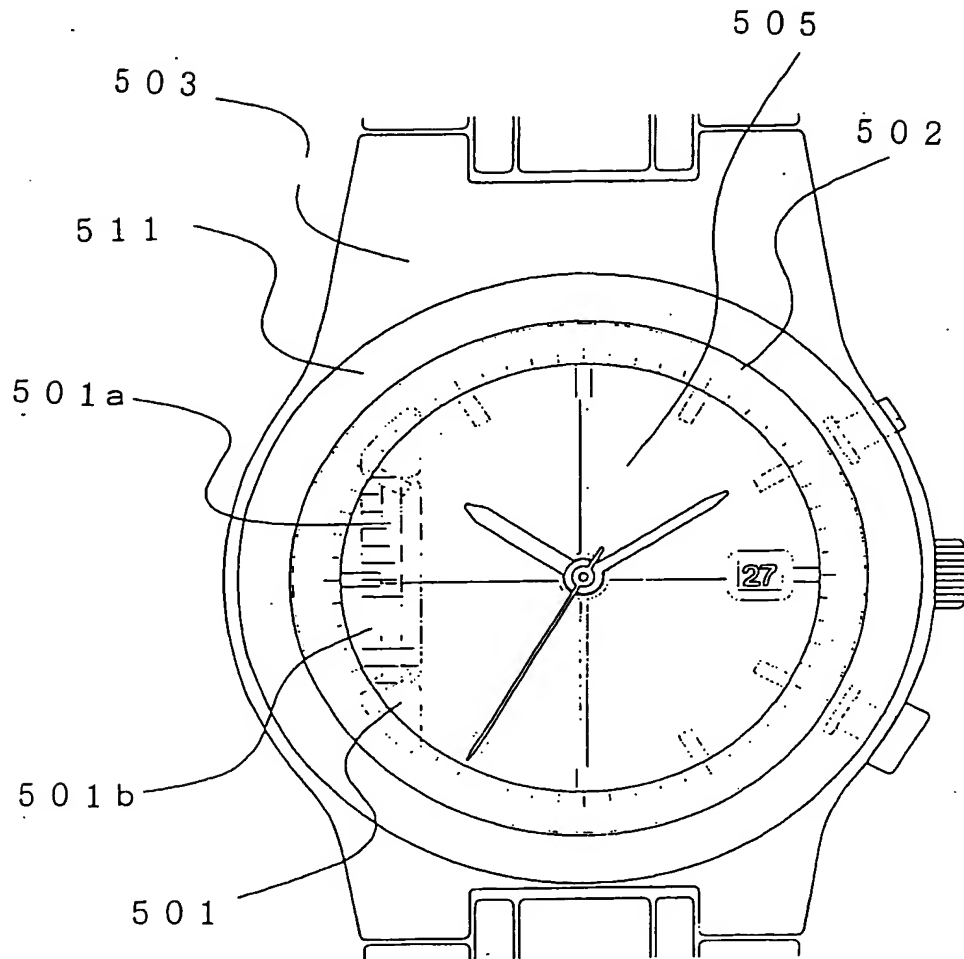
32 / 34

Fig. 37



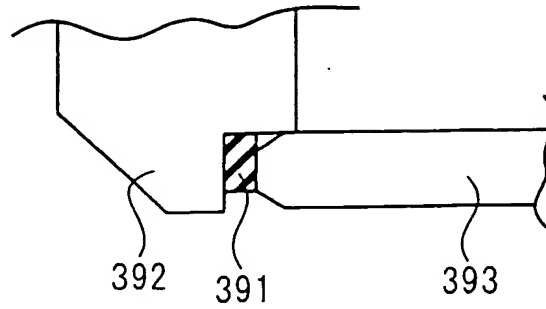
33/34

Fig. 38



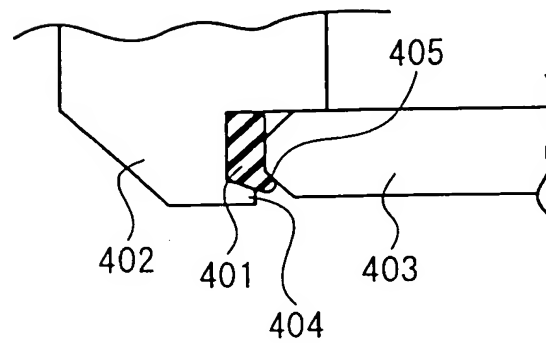
34 / 34

Fig. 39



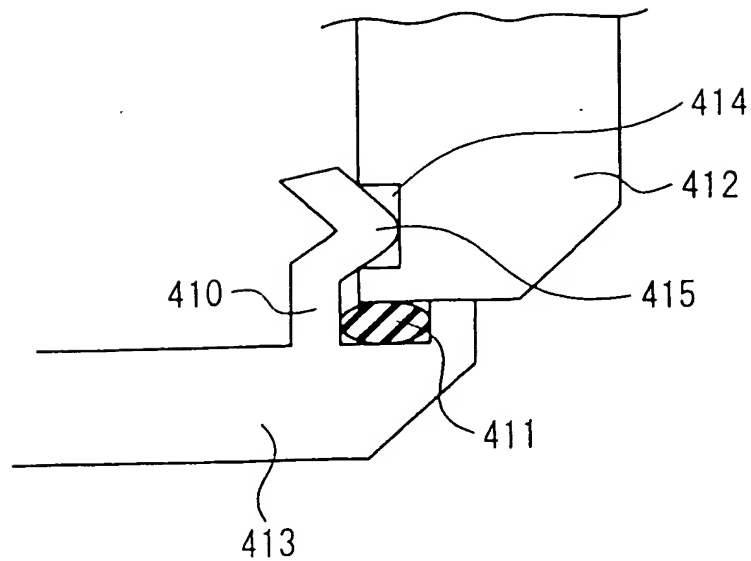
(GN-4)

Fig. 40



(GN-7)

Fig. 41



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